

REMARKS

Applicants appreciate the decision to re-open prosecution in response to Applicants request for Pre-Appeal Review and the examination provided in the non-final Official Action of June 21, 2006 (hereinafter "Office Action"). In response, Applicants respectfully submit that the cited reference fails to disclose or suggest, among other things, all of the recitations of independent Claims 1, 12, and 13. Accordingly, Applicants submit that all pending claims are in condition for allowance. Favorable reconsideration of all pending claims is respectfully requested for at least the reasons discussed hereafter.

Interview Summary

Applicants wish to thank the Examiner for discussing the pending claims with Applicants' representative, Scott Moore (Reg. No. 42,011) on September 20, 2006. During the interview, Applicants' representative stated that the present response will be filed to present arguments for patentability of independent Claims 1, 12, and 13 and various dependent claims as set forth below. Applicants' representative and the Examiner agreed to discuss the pending claims further should the Examiner decide to make the present rejection final after reviewing the present response. Applicants respectfully request that the present remarks constitute an Interview Summary pursuant to MPEP §713.04.

Independent Claims 1, 12, and 13 Are Patentable

Independent Claims 1, 12, and 13 stand rejected under 35 U.S.C. §102(e) as being anticipated by U. S. Patent No. 6,370,599 to Anand et al. (hereinafter "Anand"). (Office Action, page 2). Independent Claims 1, 12, and 13 are directed to a method, a system, and a computer program product for improving security processing in a computing network in which a security offload component is used. In particular, these three claims describe the security offload component as being in the operating system kernel. For example, independent Claim 1 recites:

providing a security offload component in an operating system kernel
which performs security processing;
providing control functions in the operating system kernel for directing
operation of the security offload component;

providing an application program;
executing the application program; and
executing the provided control functions during execution of the
application program, thereby selectably directing the security offload component
to secure at least one communication of the executing application program.
(Emphasis added.)

Claims 12 and 13 include similar recitations. Support for providing the security offload component as part of the operating system kernel is provided, for example, at page 11, lines 13 - 19 of the Specification.

The Office Action cites FIG. 2 and various passages from the Summary section of Anand as disclosing the recitations of independent Claims 1, 12, and 13. (Office Action, pages 2 - 5). Applicants respectfully submit, however, that the Office Action appears to have misinterpreted the teachings of Anand. As highlighted above, independent Claims 1, 12, and 13 include recitations directed to providing a security offload component in an operating system kernel. That is, the security offload component is provided as part of the operating system kernel software. In sharp contrast, Anand is directed to moving tasks that are typically performed in software to a hardware component. (Anand, col. 1, lines 20 - 27). Anand explains this goal of moving tasks from software to hardware in more detail as follows:

Embodiments of the present invention are directed to providing the ability to reducing the processing overhead and memory usage of a processing unit 21. This is accomplished by offloading particular computing tasks, which are accomplished for instance by way of an operating system, application programs and/or other program modules that are executing on the processing unit/CPU 21, to an appropriate peripheral hardware device connected to the computer system 20. (Anand, col. 7, lines 47 - 55; emphasis added).

Rather than move a security offload component into the kernel of the operating system as recited in Claims 1, 12, and 13, Anand specifically contemplates moving tasks performed by operating system software to a peripheral hardware device in the passage reproduced above. With respect to the specific function of IP security (see, IP Security function 144 of FIG. 3 of Anand), Anand does not suggest moving such functionality into the operating system kernel, but instead suggests moving such functionality into the network interface card (NIC) 100 hardware. (See, e.g., Anand, col. 11, lines 2 - 6 and col. 12, lines 15 - 19).

Applicants further submit that Anand inherently does not disclose or suggest the recitation "providing control functions in the operating system kernel for directing operation of the security offload component" of Claim 1 and analogous recitations of Claims 12 and 13 as Anand describes moving the security functionality into a hardware component, such as a NIC, to relieve the CPU, which executes the operating system software, of that task. (*See, e.g.*, above discussion and Anand, col. 3, lines 18 - 22).

Accordingly, for at least the foregoing reasons, Applicants respectfully submit that independent Claims 1, 12, and 13 are patentable over Anand, and that Claims 2 - 11 and 14 - 20 are patentable at least as they depend from an allowable claim.

Various Dependent Claims are Separately Patentable

As discussed above, dependent Claims 8 - 11 are patentable at least as they depend from patentable independent Claim 1. Applicants further submit, however, that these dependent claims are separately patentable for at least the reasons discussed hereafter.

Dependent Claims 8 - 11 stand rejected under 35 U.S.C. §102(e) as being anticipated by Anand. Each of dependent Claims 8 - 10 provides additional details with respect to what is provided to the security offload component for use in securing communications. Dependent Claim 11 and new Claim 17 provide additional detail with respect to how outbound data is sent from the security offload component. As discussed above, Anand does not disclose or suggest providing a security component as part of the operating system kernel. While Applicants acknowledge that Anand does suggest that certain security functionality may be provided by a hardware peripheral (*see, e.g.*, Anand, col. 2, lines 55 - 60), Applicants submit that Anand does not appear to disclose any of the specific details of dependent Claims 8 - 10, 11, and 17. Accordingly, for at least the foregoing reasons, Applicants respectfully submit that dependent Claims 8 - 11 and 17 are separately patentable over Anand.

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CONCLUSION

In light of the above remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "D. Scott Moore", written over a horizontal line.

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